

REMARKS

Claims 1 - 23 remain active in this application. No amendments are currently made and no new matter has been introduced into the application.

Claims 1, 7 - 11, 13 - 18 and 22 have again been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta. Claims 2, 4 - 5, 12 and 23 have again been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta and Sullivan. Claim 3 has again been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta, Sullivan and Ortel. Claim 6 has again been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta and LoGalbo et al. Claims 19 - 21 have again been rejected under 35 U.S.C. §103 as being unpatentable over Ritter in view of Citta and Ortel. All of these grounds of rejection, repeated from the office action of November 2, 2005, are respectfully traversed, for the reasons of record, particularly as indicated in the response filed May 2, 2006, which is hereby fully incorporated by reference.

In that response, it was respectfully pointed out that "the invention is an arrangement for upstream signaling over a cable communication system to indicate conditions at each of a large plurality of cable drops connected to a central facility" and "provides time-multiplexing of inputs from all cable drops cyclically *without polling of the respective cable drops* while achieving very wide operational margins. The wide operational margins while monitoring a large number of cable drops in an acceptably short period of time is largely achieved through avoidance of any need for allocation of downstream signaling bandwidth for

interrogating subscriber units or termination sections." In other words, the invention is distinct from any interrogator-responder system in that it is self-scanning or self-polling and *avoids any need for the termination sections of the cable system to be interrogated* in order to obtain condition information associated with a particular cable drop" (emphasis added).

Interrogation or polling of cable drops or subscriber units, of course, involves downstream signalling (either for direct interrogation to cause a response or to synchronize a slave time base at the cable drop with a time base at a central facility) and consumes bandwidth over the communication link; both of which are avoided by the present invention by providing independent time bases which are externally synchronized (e.g. by a broadcast signal which does not consume bandwidth on the communication link) at both the central facility and the cable drops with redundancy and confirmation of correct operation and synchronization by transmission of cable drop information in the upstream signal. In other words, by using independent, externally synchronized time bases at both the cable drops and the central facility, the invention is self-scanning or self-polling and thus the *need for any downstream signalling is avoided* and the bandwidth which would otherwise be consumed by downstream signalling can be utilized to provide wide operating margins even when communications are conducted with large numbers of cable drops during satisfactorily short intervals to provide useful and suitably timely reporting of conditions. It was also previously pointed out that the self-polling/self-scanning feature of the invention clearly distinguishes it from all of the prior art applied by the Examiner which are interrogator-responder systems which *necessarily require downstream signalling*

to perform interrogation or polling or at least synchronization of remote time bases with a central, master time base.

The Examiner, in response to these arguments, has disagreed; insisting that downstream signalling is, indeed, required by the present invention. The Examiner's position is not that the self-polling feature and the avoidance of a need for downstream signalling is not distinct from the interrogator-responder type prior art applied but that *the invention is also an interrogator-responder system requiring downstream signalling*, contrary to the disclosure and teachings provided by the present specification; summarily dismissing all of the arguments previously presented and suggesting that Applicant *"confuses himself or does not carefully review his or her own specification."*

The Examiner bases this position on the disclosure at page 16, line 20, through page 17, line 30, which the Examiner asserts to indicate that the "system termination is NOT autonomously responsive to a broadcast time slot without downstream signalling for interrogation or synchronization" (Examiner's emphasis). The Examiner's attention is, however, respectfully called to page 16, lines 24 - 26, within the passage relied upon by the Examiner, wherein it is explicitly stated in regard to the constitution of the central facility that: "However, it is considered preferable but not necessary to include a time slot counter 24, a polling frequency control 25, a synchronization reset transmitter 26 and an error checking device 27" (emphasis added). The following paragraph refers to these optional features as "perfecting features" which indicates that they are not necessary to obtaining the meritorious effects of the invention in accordance with the principles thereof but

which may be included and may be preferred in order to provide enhanced performance under some circumstances.

Specifically, the paragraph from page 17, line 2 to line 20, in the passage on which the Examiner relies, recites (emphasis added):

"These perfecting feature of the invention are preferably supported by a reset synchronization transmitter 26 which emits, for example, a pulse or tone burst to reset the remote time slot counters 24' of all directional couplers so that the counts of all counters 24, 24' will be the same. It will be recalled from the foregoing that the time bases 23, 23' will be synchronized by detection of a common radio signal or the like but may or may not have the facility for providing a particular time indication at reasonably short intervals to which the counters may be synchronized. The synchronization reset transmitter provides a convenient and inexpensive facility for synchronizing the counters, if desired, and may use any desired count of counter 24 to do so, such as being responsive to a transition of the most significant bit (MSB) of the counter output.

Thus, it is abundantly clear from the specification and, indeed, the very passage thereof relied upon by the Examiner, that the invention does not, in fact, require, any downstream signalling at all but also does not preclude downstream signalling consistent with the invention for additional or enhanced functions such as, for example, earlier counter reset than may be available from a broadcast universal time base or changing polling frequency as disclosed at page 15, lines 9 - 14.

Moreover, in the former case it should be noted that if counter reset is considered necessary or desirable to quickly restore synchronization, the bandwidth and operating margins would not be compromised for the simple reason that upstream signalling would, presumably, have already been interrupted.

It is thus respectfully submitted that it does not logically follow that a function which is allowed and not precluded consistent with the invention is therefore necessary to the operation of the invention and it certainly does not logically follow that synchronization of independent time bases in accordance with an external source such as a broadcast time signal also requires signalling from one time base to another (e.g. downstream from the central facility to the signal splitter/cable drop) to maintain synchronism which is already otherwise maintained, much less that a self-scanning/self-polling system as provided by the invention is necessarily an interrogator-responder system and the Examiner is clearly in error in the assertions to the contrary by which the Examiner dismisses the arguments previously presented.

More specifically, it is first respectfully pointed out that even if, *arguendo*, the Examiner were correct in asserting that downstream signalling is required by the invention, that "fact" would not be probative of the propriety of the rejection. That is, any assertion that downstream signalling is required does not serve to indicate that the independent time bases synchronized with an external, broadcast signal as claimed is answered or shown to be obvious over other different arrangements such as master/slave time bases or direct interrogation signals in the prior art which clearly require downstream signalling that the invention does not and thus avoids while realizing its meritorious functions. By failing to

address this basic issue, the Examiner has clearly failed to make a *prima facie* demonstration of the obviousness of any claim in the application.

Further, it is respectfully submitted that the error in the Examiner's reasoning and interpretation of a passage of the specification contrary to its clear meaning is not only an attempt to construe the invention to conform to the prior art but a clear exercise in impermissible hindsight as well as being indicative of insufficient consideration of the actual content of the specification and the claims of the present application. Conversely, the Examiner has not provided any evidence in support of his assertions in regard to any technical necessity of downstream signalling to achieve operability but, rather, the Examiner has sought to construct an admission from the specification contrary to the plain meaning of the passage of the specification relied upon to (improperly) do so and thus has improperly dismissed remarks previously submitted which discuss the distinctions of the invention, as claimed, from the arrangement provided in each of the reference and the level of ordinary skill in the art discernable from their combination.

In summary, none of the prior art applied by the Examiner teaches or suggests a system having independent time bases synchronized from an external, broadcast time base signal or which are capable of functioning without downstream signalling as detailed in the above-incorporated response filed May 2, 2006; remarks which the Examiner has improperly dismissed based on a clearly erroneous and illogical interpretation of a passage of the specification clearly contrary to its evident content which is indicative of use of impermissible hindsight. The Examiner has thus again failed to make a *prima facie*

demonstration of obviousness in regard to any claim in the application and, instead, has improperly suggested Applicant's confusion or inadequate review of the present application rather than seeking to understand the invention or even apply basic logic to what is actually disclosed. Additionally, the Examiner's asserted basis for dismissing the previously presented remarks is irrelevant and unrelated to the propriety of the grounds of rejection which they traverse since the Examiner's view of what may or may not be required by the invention has no bearing on whether or not the teachings, suggestions or evidence of the level of ordinary skill in the art discernable from the references answer the recitations of the claims under 35 U.S.C. §102 or §103.

Accordingly, it is respectfully submitted that the errors, omissions and improprieties of the present, repeated grounds of rejection are abundantly clear and evident. Therefore, reconsideration and withdrawal of the same are respectfully requested.


A sincere effort has been made in the foregoing remarks and those previously presented, for which proper consideration is respectfully requested, to convey an improved understanding and appreciation of the invention. Upon review, should the Examiner feel that there is any point of misunderstanding in regard to the invention, as claimed, it is respectfully requested that the Examiner contact the undersigned by telephone at the number given below in order to expeditiously resolve the same.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such

reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



Marshall M. Curtis
Reg. No. 33,138

Whitham, Curtis, Christofferson & Cook, P. C.
11491 Sunset Hills Road, Suite 340
Reston, Virginia 20190

(703) 787-9400
Customer Number: **30743**